

EXHIBIT

12

To Bitcoin and Beyond: How Taro Expands the Lightning Universe



Ryan Gentry
Oct 6, 2022

18



Welcome to the latest edition of the Lightning Lab, a newsletter filled with Lightning Network updates, community coverage, and, of course, memes! At a time where there's a global currency crisis with the Bank of Japan re-implementing yield curve control and the Bank of England restarting quantitative easing, the Lightning community continues to grow the financial network of the future. During a week of global macro chaos, we launched the alpha release of the Taro protocol, which will serve to change the future of FX, and the Lightning Network hit an ATH of 5,000 BTC of public capacity! 

In this issue, we discuss the launch of the alpha Taro code, a pair of excellent articles on the future of Lightning and Taro, and as always highlight a host of exciting community updates!

And in case you missed it, we hosted a Twitter spaces this week on Taro discussing its global impact with key builders from the community.

To Bitcoin and Beyond...

Last week, we launched the alpha release of the Taro protocol, enabling developers to mint, send, and receive assets on the bitcoin blockchain. In April, we first announced Taro, a Taproot-powered protocol for issuing assets that can be transferred over bitcoin and in the future, the Lightning Network for instant, high volume, low fee transactions. We are grateful to the bitcoin developer community for their valuable feedback, and have incorporated it into the draft Bitcoin Improvement Proposals (BIPs), which specify the protocol, and the Taro alpha release.



Lyn Alden
@LynAldenContact

With the \$80 million Strike series B, the launch of Bitnob in Kenya along with M-Pesa integration, and now the release of alpha Taro code by Lightning Labs, this has been a pretty big news week for the #LightningNetwork.



Lightning Labs  @lightning

Today we're excited to announce the initial code for Taro , a new protocol to issue and transfer assets on #bitcoin and Lightning .

With this release, we're one step closer to bitcoinizing the dollar, and the global financial system! 🌎⚡

<https://t.co/mRrLyttgXv>

4:43 PM · Sep 28, 2022

1,043 Likes 163 Retweets

We're incredibly excited to get the new Lightning capabilities into the developer community's hands, and have received amazing feedback already from so many devs running Taro!



Satimoto ⚡
@SatimotoApp

Running Taro 🌎



Discover more from The Lightning Lab

Lightning Network updates, community coverage, and, of course, memes!

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a new protocol to

lar, and the global

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8:11 PM · Sep 28, 2022

156 Likes 17 Retweets



Victor Afa



@afalol

Okay I'm running taro too guys !

11:04 PM · Sep 28, 2022

77 Likes 11 Retweets

[Bitcoin Magazine](#), [Coindesk](#), and [the Block](#) covered the announcement, among others.

In the coming months, more enhanced features will be added to the Taro protocol including universe functionality. Universes will allow users and asset issuers to provide proofs about asset provenance, supply issuance, and more easily interact with Taro asset data. Once the on-chain functionality is complete, we'll work towards integrating the Taro protocol into lnd, bringing Taro assets to the Lightning Network. The initial work to implement simple, unannounced Taproot channels in lnd has begun, a prerequisite for Lightning channels that can send and receive Taro assets.



[justinwnewton](#)
[@justinwnewton](#)

This is a big step forward for Lightning, and will help BTC adoption in Latin America and other parts of the world where the USD is currently the desired currency. Great work by the Lightning Labs team, and broader Lightning community!



Lightning Labs⚡️ @lightning

Today we're excited to announce the initial code for Taro 🥕, a new protocol to issue and transfer assets on #bitcoin and Lightning. ➡️ [SOON](#).

With this release, we're one step closer to bitcoinizing the dollar, and the global financial system! 🌎⚡

<https://t.co/mRrLyttgXv>

5:17 PM · Sep 28, 2022

20 Likes 7 Retweets



Max Webster
@MaxAWebster

OMG it's here!!! Biggest news of the year ⚡⚡

Bitcoinizing the dollar is the quickest path to 8B ppl joining the global economy. All on #Bitcoin & ⚡ rails. If you're already hacking on the release & building for this future, please reach out!

⚡ Lightning Labs⚡ @lightning

Today we're excited to announce the initial code for Taro ⚡, a new protocol to issue and transfer assets on #bitcoin and Lightning SOON.

With this release, we're one step closer to bitcoinizing the dollar, and the global financial system! 🌎⚡

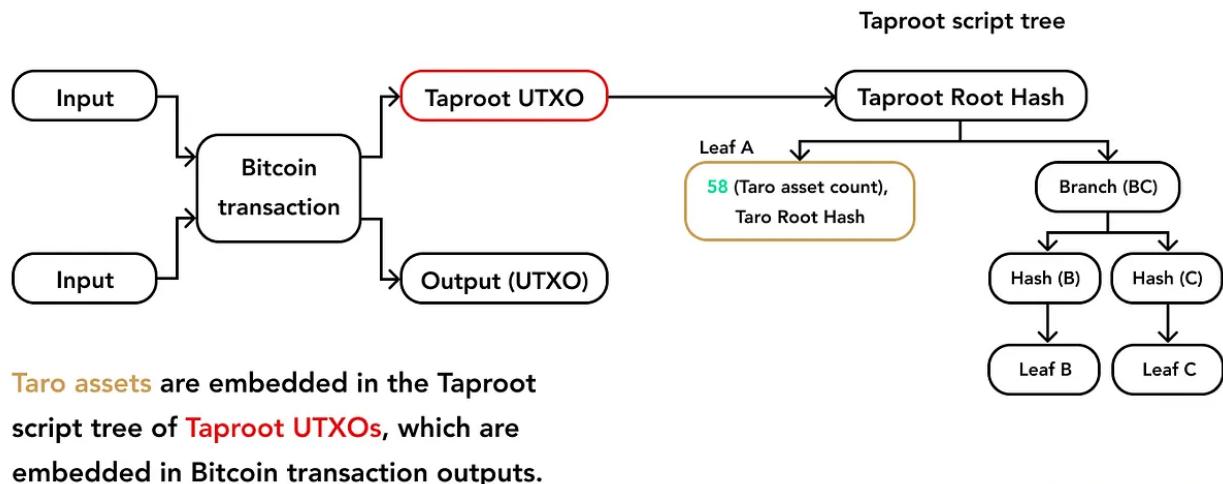
<https://t.co/mRrLyttgXv>

4:43 PM · Sep 28, 2022

83 Likes 11 Retweets

Earlier this month, our friends at **River Financial** published an excellent explainer of the Taro protocol. We particularly enjoyed their graphics, like this one explaining how a Taro asset is actually embedded within an existing bitcoin Unspent Transaction Output (UTXO) - a functionality included in the initial release!

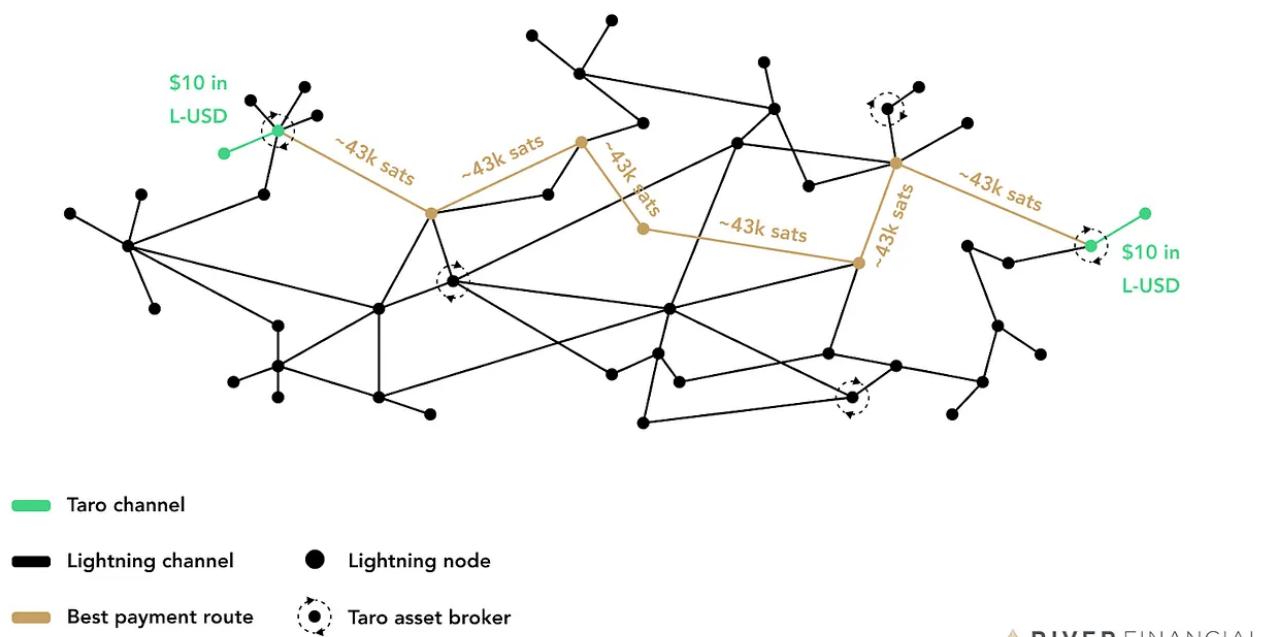
Taro Transaction Using Taproot



 RIVER FINANCIAL

We also liked this graphic visualizing a Taro transaction across the Lightning Network, which is coming soon™. It illustrates well how Taro assets will exist at the edges of the Lightning Network, and leverage the existing bitcoin liquidity for their transfers.

Taro Assets Exchanged on the Lightning Network



 RIVER FINANCIAL

We are incredibly excited to get the initial Taro code release into the hands of the developer community, and we can't wait to see what they build with it!

News & Updates

Lightning Launches



Natalie Brunell
@natbrunell

This announcement from Ross Stevens of @NYDIG_BTC is 🔥🔥🔥
#Bitcoin #Lightning Accelerator WOLF 🐺⚡⚡⚡



A photograph of Ross Stevens, Executive Chairman of NYDIG, speaking at a podium during the BitBlockBoom event. He is wearing a grey t-shirt with the 'Wolf' logo. Behind him is a large screen displaying the 'Wolf' logo with the tagline 'IN WOLF'S CLOTHING'. An American flag is visible in the background. In the foreground, the back of a person's head is visible.

9:53 PM · Aug 26, 2022

500 Likes 81 Retweets

NYDIG, the New York Digital Investments Group, will launch a Bitcoin and Lightning accelerator called Wolf. In his announcement at BitBlockBoom, Ross Stevens, NYDIG's Executive Chairman, said "The reality is that this year, the progress in Bitcoin and Lightning is staggering. Month after month after month, the nodes on Lightning are growing." The accelerator is geared toward individual founders and small teams, developers working on

Lightning, Taro and covenants, and pre-seed, seed, and series A companies. Number of Lightning builders go up! 🎉

 CoinDesk
@CoinDesk

@Strike, the crypto payment company founded by @jackmallers, has raised \$80 million in a Series B round led by @Ten31vc.

By @OKnightCrypto.

trib.al
Jack Mallers' Crypto Payment Firm Strike Raises \$80M

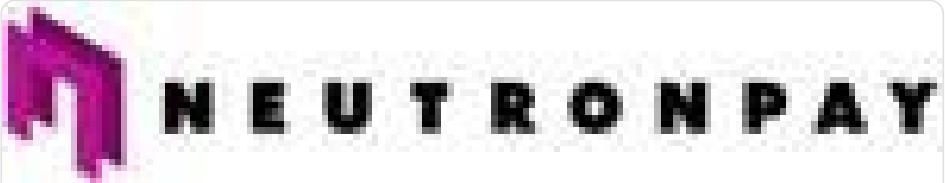
1:38 PM · Sep 27, 2022

233 Likes 40 Retweets

Strike has raised \$80 million in a Series B round led by Ten31. The capital will be used to drive Strike's efforts to revolutionize payments for the largest merchants, marketplaces, and financial institutions in the payments industry. Congratulations, as Lightning Strikes!! 💥

 Buudozer
@subnetmask

Pleased to share we've closed our seed round. With focus in South East Asia and its communities in North America.



linkedin.com
Albert Buu on LinkedIn: Lightning Network Startup Neutronpay Raises \$2.25M in Seed Funding | 19 comments

3:22 PM · Sep 14, 2022

16 Likes 5 Retweets

Neutronpay, a Vietnam-focused Lightning startup, raised a \$2.25M seed round led by Hivemind Ventures. This funding has helped with additional headcount across various departments, with a focus on further development of enterprise APIs, soon to be rolled out mobile consumer app, sales, marketing, and compliance.



BitGo
@BitGo

BitGo's New Custodial Lightning allows customers to get up and running quickly and seamlessly integrate the [@lightning](#) network into their services.

Learn more:



bit.ly
BitGo Unveils Custodial Lightning

10:02 PM · Sep 21, 2022

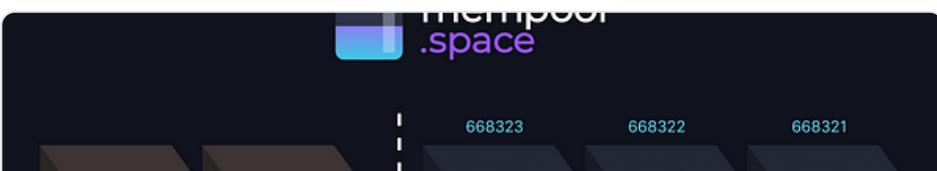
84 Likes 16 Retweets

BitGo introduced their new custodial Lightning service. The service is built natively into the BitGo platform, so it works seamlessly with BitGo's existing access and policy controls. The end result is that their users' Lightning payments can undergo the same approval process and controls as any other on-chain transaction. This is huge because it opens up the door for many of the existing Bitcoin companies to enable Lightning payments!

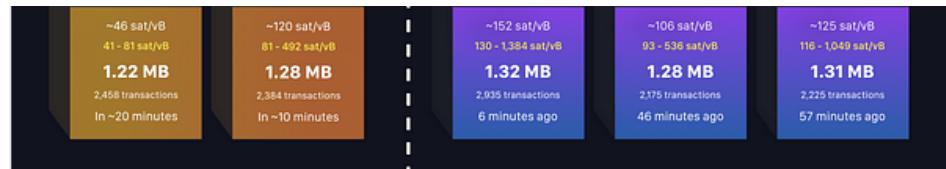


Fulmo ⚡
@fulmolightning

Welcome, @mempool Lightning explorer! ⚡ mempool.space/lightning



668323 668322 668321



mempool.space
The Mempool Open Source Project™

2:31 PM · Aug 31, 2022

148 Likes 36 Retweets

Mempool.space, the popular open-source Bitcoin blockchain and mempool explorer, now supports Lightning! We love to see new Lightning explorers come to market, welcome Mempool team!

Lightning Stats

- ✓ The Lightning Network's total public capacity hit 5,000 BTC! Congratulations to the entire community on this milestone and prepare your Vegeta memes because at this rate we'll be over 9,000 soon!!
- 🎧 Podcasting 2.0 has been integrated by over 9,000 podcasts. All of these podcast hosts are now being streamed satoshis from their listeners, and some have started sharing their earnings with their guests and listeners.
- ✓ LN Markets Q3 routing volume was an ATH, with 140 BTC routed through their nodes. The amount of Bitcoin they forward on the Lightning Network more than doubles each year.
- 🦋 Alby, the LN browser extension, surpassed 3,000 installs. Sweet!
- 💰 Wallet of Satoshi shared some interesting stats including their routing node highlights in the past year: 40% of all payments were routed for free and payments from 1-50M sats paid an average fee of 0.04%. Amazing!
- 💡 LNnodeinsight has been monitoring the cost of Lightning transactions, finding an average fee of only 0.1%. This is easily 10x more cost effective than the cheapest payments on card networks, and 100x more cost effective than some international payments.
- 📦 Bitfinex settled 43 BTC (~\$860k) via the Lightning Network in only 24 hours.
- 📝 LN Capital started “The Lightning Report”, a weekly review of Lightning stats and data. Their first issue showed the distribution of routing nodes in the network and their total capacity. In the second edition, they highlighted Lightning Network fees: a payment that

needs 3 routing nodes to reach its destination will pay on average 0.1% in fees. After 10 hops they will pay ~0.36% in fees.

-  **Stacker News** had 1,273 users stacking 100+ sats on the site. Combined, these users have earned 22,000,000+ sats, and are earning millions more each month.
-  **Robosats**, a peer-to-peer bitcoin exchange built on Lightning, has reached all-time highs in trading volume each month since launch. September will be their first ever month with 10+ BTC (~\$190k) traded.

Lightning Ecosystem

-  **Bitnob** is now available in Kenya. Users can receive Lightning payments from apps like Cash App in the US direct to their M-Pesa accounts in seconds and for negligible fees!
-  **Strike** launched a Visa card with Bitcoin rewards. 1% of the Strike Card profits will be donated to open-source Bitcoin development.
-  **MicroStrategy** is building a Lightning Network-based software-as-a-service (SaaS) platform. This platform will help their enterprise customers secure networks, monetize websites, and deploy wallets using Bitcoin, and they're hiring for it!
-  **Bolt.Fun** announced Legends of Lightning, an online global hackathon tournament from Oct 12th to Nov 28th. They plan to award 3 BTC (~\$60,000) to makers who build the most awesome bitcoin and Lightning projects!
-  **Max Webster** wrote a blog post on how he thinks Bitcoin Lightning tipping can create a knowledge marketplace, normalized across different platforms, that can ultimately disrupt Google search through what Oscar Merry calls "ValueRank".
-  **Coinbase** published an article from its Venture Capital arm highlighting the Lightning Network's promising growth, and its potential to disrupt the payment and remittance industries.
-  **Vinteum** is a new non-profit organization dedicated to training and funding open source Bitcoin and Lightning developers. Their initial focus will be Brazilian engineers, but they plan to expand to other countries in LATAM.
-  **Andy Schroder** released a new update to his Distributed Charge project, expanding the scope from a Tesla car streaming payments to a charging station over Lightning, to general purpose electric metering with micropayments over Lightning. We love to see it!
-  **Impervious** announced the general release of the alpha version of their Browser will be October 19th, including P2P group video calls, encrypted messaging, file sharing, live docs, Lightning integration, and more.

- **Machankura** users can now redeem Azteco Bitcoin vouchers using the USSD interface (an SMS-based menu system for feature phones). 495M Africans, with any phone, can now buy bitcoin without an internet connection, and transfer it over the Lightning Network. A huge leap forward for number of people go up!
- **Geyser** announced the results of the Round 1 of their Geyser Grants. They gave away 100,000,000 sats (~\$20k) across 45 selected projects from all over the world, working on education, culture, or building in the Bitcoin and Lightning ecosystem.
- **LN Markets** released a new version of their Lightning-based exchange where they raised trading limits from 2M to 10M sats, added new languages, and added Lightning Node Connect (LNC) to allow users to login directly with their nodes.
- **VN BitcoinVN**, an OTC trading desk, allows users to fund any local bank account via the Lightning Network. More progress on making “cross-border” payments obsolete!
- **Satsback** added 2,750 new stores in Denmark, Sweden, Czech Republic, and Finland, and also launched an integration with the **Geyser** crowdfunding platform where users can automatically redirect the sats they've earned by making their purchases through Satsback to bitcoin crowdfunding campaigns. Interoperability ftw!
- **Zebedee** integrated with Slice, a browser extension that enables users to easily monetize the time and attention they invest in internet browsing. Users can now get paid in Bitcoin for ads.
- **Ditobanx**, a Bitcoin fintech company from El Salvador building wallets, point of sale terminals, and offering Bitcoin collateralized credit lines, just released their Bitcoin Gift Cards and vouchers service which can be redeemed through LN.
- **Alby** released Insatgram, a platform for buying and selling images powered by LNURL and LSATs. Alby also released their Wallet API, with Podverse support, and they launched the Lightning Published Plugin, a Wordpress plugin that allows content creators to monetize their content through paywalls and donations.
- **LNBank**, a BTCPayServer extension for enabling custodial Lightning operations, released a new version that makes LNBank wallets compatible with LNDhub, supporting different access levels, and adds support for LNURL-Pay and Lightning Address when sending.
- **Vida**, the creator engagement app powered by Lightning payments, rolled out a brand new experience inspired by LinkTree. Users can create landing pages where they can connect their social media, websites, podcasts, etc., and of course, get paid in sats for their attention.
- **Thndr Games** launched a new game, Club Bitcoin: Solitaire. Solitaire, but you earn sats!

-  **BTC Map** is an open source effort dedicated to creating a map showing where people can spend Bitcoin and whether they accept Lightning payments. The project uses OpenStreetMaps to tag places, allowing anyone in the world to contribute and any Bitcoin/Lightning app to integrate it.
-  **Stack Sats** is a new directory by Kevin Rooke with more than 50 apps and tools that can be used to stack sats. They also have a newsletter with updates on the world of earning through Bitcoin Lightning applications.
-  **Mash's Boost** product is now live on Kevin Rooke's and Connect the World's websites, and two books: "Magic Internet Money - A Book about Bitcoin" by Jesse Berger and "Bitcoin: Everything Divided by 21 Million" by Knut Svanholm. They also released a Wordpress plugin to enable Wordpress users to easily integrate with their products.
-  **Graham Krizek**, CEO of Voltage, wrote a series of Twitter threads exploring some of the market opportunities he sees in the Lightning Network ecosystem. Voltage also published a case study on the non-custodial hosting solution they discovered by partnering with Thndr Games.
-  **Bitcoin Island** is a Bitcoin Beach-like community spearheaded by Pouch, a Lightning startup in the Philippines. They already have over 170 shops, restaurants, and hotels accepting Lightning payments!
-  **Pouch** launched a minimalist wallet, Pouch Lite, so they can onboard everyone in the world, not just in the Philippines, to the Lightning Network.
-  **Coincorner** launched a feature that supports recurring Lightning payments to Lightning address or LNURL pay.
-  **OpenNode** partnered with LaunchCart, a Shopify competitor, to give eCommerce sellers the ability to accept Bitcoin and Lightning payments.
-  **myNode** released an SDK for developers to build new Bitcoin and Lightning applications on top of their nodes.
-  **satsoverflow** is a new Lightning-powered web app that looks and feels just like Stack Overflow, but you can post bounties for your questions or get paid for your answers with sats!
-  **Cashu** is a new Chaumian Ecash wallet and mint with Lightning Network support.
-  **BTCRetailX** is a full featured point of sale system for retail that accepts both Bitcoin/Lightning and credit cards. They also integrated with Azteco's bitcoin vouchers and Ibex Mercado's PoS system.

- ☀️ **Lighthouse** is a new Lightning explorer with a new creative way of showing up how nodes in the graph are connected with each other. It's fascinating to see all of the different ways to visualize the Lightning Network.
- 🖥️ **Layer2Labs** announced their Lightning Service Provider (LSP) product that allows graphing and route calculation, liquidity provisioning, channel backups and recovery, submarine swaps, watchtowers and payment forwarding.
- 💻 **bcoin**, a Bitcoin node implementation written in node.js, has implemented BIP 157/Neutrino, a lightweight Bitcoin client used by wallets like Breez or Blixt that allows a Lightning Network node to run without a full node. Their integration tests with lnd worked seamlessly!
- 📱 **Kubbent** is a new non-custodial Lightning wallet built with Neutrino + lnd, created by a 16 year old Brazilian developer.
- 🎤 **Fountain**, the Lightning-powered podcasting app, released new versions with faster boosts, timestamp clipping, referral and earning updates. Users that refer friends, get likes from other users, or support podcasts can now earn rewards.
- 🐻 **dalle2bot**, a Telegram bot, and **describe.photo**, a website, allow anyone to generate OpenAI DALLE 2 images and pay with sats through the Lightning Network. The future of art will be powered by Lightning!
- 🛡️ **LNnodeinsight** has a new tool that suggests how much capacity and what fee rate node operators should set for a specific channel.
- 🌈 **Umbrel** launched new updates to their Lightning app, like default support for Atomic Multi-path Payments (AMP), a simplified recovery interface for Static Channel Backups, and more. They also added new apps to their marketplace like Robosats, the P2P Bitcoin exchange.
- 🌎 **Connect the World** podcast partnered with Satsback and launched their own NFC Lightning card, powered by LNBits.
- 💰 **Lightning Tip Bot**'s new "Receive button" turns Telegram into a Lightning Point of Sale, powered by LNURL.
- 💳 **LNBits** released a new extension for business invoices, and an extension that distributes sats among members of a community through recurring payments to Lightning addresses. They're also working on an NFC-enabled point of sale that runs in browsers, this team is tireless!
- 🏗️ **TunnelSats** provides an easy way for Lightning routing nodes to establish a hybrid connection to the network, using both Tor and Clearnet behind a VPN, so users can have a

fast, reliable, and secure operation.

- 🌟 **deezy**, a Lightning routing node, is now offering a trusted swap service so people can send on-chain funds to a Lightning Address.
- 💎 **Diamond Hands**, an LN routing node operator community in Japan, recently published a report where they cover the mechanisms, use cases, and potential of the Lightning Network. They have also published a series of articles in Bitcoin Magazine summarizing their report.
- 💰 **Tallycoin** released version 3 of their crowdfunding platform, with a new desktop and mobile redesign, customizable fundraiser pages and better discoverability.
- 💳 **Lightning Bridge** is a digital ATM that allows Web3 and NFT users to deposit and withdraw funds through the Lightning Network from other chains.
- 🎉 **Amboss's Keysend Billboard** is a simple yet powerful demonstration of how Lightning can be used to create totally new experiences and interactions, with users publishing node promotions, Formula 1 racing positions, tools and services, downtime alerts, podcast alerts, and much more.
- 🔒 **LN VPN** is a website that allows people to buy a VPN service simply by doing a Lightning payment. An important tool for human rights activists!

How Taro Expands the Lightning Universe

Over the past few months, several of our favorite thinkers posted new long-form content on the Lightning Network and Taro. The brilliant macro strategist Lyn Alden published “A Look at the Lightning Network,” where she examined how bitcoin has evolved as a medium of exchange, and included an analysis of the Lightning Network as a whole.



Lyn Alden

@LynAldenContact

The latest version of my **#LightningNetwork** article is now available on my website.
lynalden.com/lightning-netw...





7:04 PM · Aug 22, 2022

1,167 Likes 209 Retweets

While the article contains excellent explanations regarding why decentralized money must start as a Store of Value first, how bitcoin works, why it was designed the way it was, and why blockchains must scale in layers, this newsletter is focused on the Lightning Network analysis in particular. Alden described the compounding network effects of Lightning succinctly when she wrote:

Once there are tens of thousands, hundreds of thousands, or millions of participants, and with larger average channel balances, then routing a payment from any arbitrary point to any other arbitrary point on the network becomes exponentially easier and more reliable.

Three years ago, when the Lightning Network was only composed of 28k channels totaling ~835 BTC (\$8M) of total capacity (less than 1/10th of its size today in USD terms!), it was very difficult to reliably make \$100 payments. As more capital has been added to the network, node operators have improved their liquidity management techniques, and user interfaces have improved the Lightning experience, those same \$100 Lightning payments have become exponentially easier and more reliable. The network effects of Lightning are such that every individual improvement to some aspect of the network contributes to improving the quality of the network as a whole. Alden summed up that collective improvement well by recapping exchange adoption over the last three years:

Bitfinex and River Financial integrated Lightning for their users in 2019. Bull Bitcoin and Okcoin integrated Lightning for their users in 2021. Cash App and Kraken integrated Lightning for their users in 2022. Tens of millions of people now technically have access to the Lightning network if they want it.

Each new entrant to the network brought new users, who by making transactions produced more volume, which helps routing nodes earn more fees, which induces more capital allocation to the network, improving its utility and causing more and larger entrants to join the network. As detailed last year in this newsletter, the flywheel is really starting to spin and this network effects-based growth is really beginning to compound on itself.

Alden also touched on the Next Big Thing in the Lightning Network that has the potential to supercharge its growth: Taro. In keeping with the focus on network effects, she describes well why it is so important that Taro asset channels can plug into the existing Lightning Network rather than trying to bootstrap their own liquidity and ecosystem:

Importantly, the core of the network remains focused on bitcoin channel liquidity, whereas specific Taro assets would generally be on the network periphery. This avoids fracturing overall network liquidity, since ultimately it's all moving through bitcoin channels for most of its path through the core of the network. In other words, instead of having dollar channels alongside bitcoin channels throughout the whole network (which would fracture the liquidity of the network), the dollar channels would be primarily limited to the edges of the network while the bitcoin channels that continue to grow in number will remain the primary channels for routing payments through, including those dollar payments.

The fact that Taro's design privileges the bitcoin liquidity allocated to the network in this way has enormous implications for the burgeoning bitcoin-native capital markets, which our friends Nik Bhatia and Joe Consorti at the Bitcoin Layer wrote about this summer as well in [a report titled "The Time Value of Bitcoin"](#).



The Bitcoin Layer
@TheBitcoinLayer

THE TIME VALUE OF LIGHTNING NETWORK ⚡

Using sats as the transmittal rails for transactions across every currency opens the door for a bitcoin-denominated global capital market.

The transition from reserve asset to reserve currency is well underway.

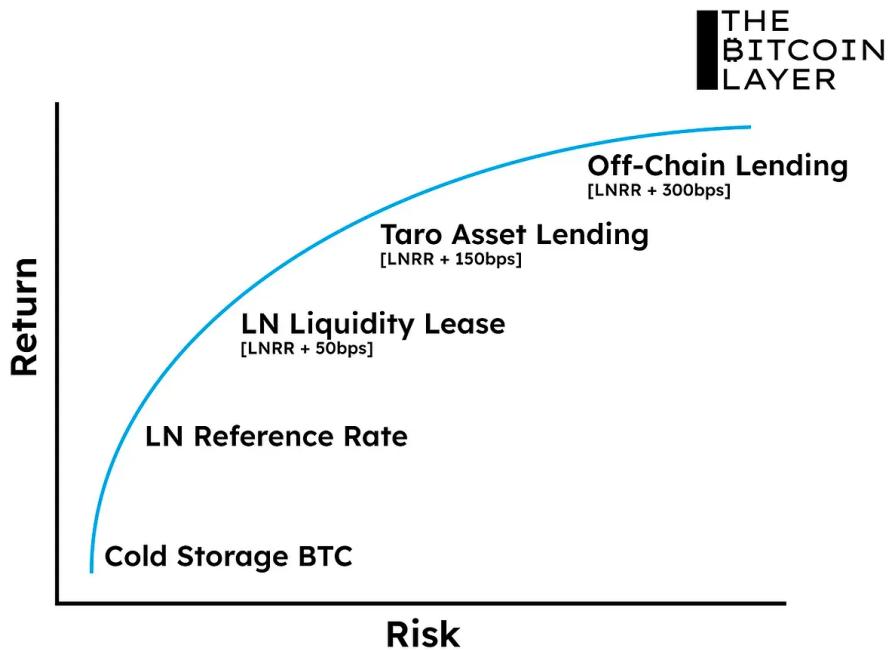


[thebitcoinlayer.substack.com](https://thebitcoinlayer.substack.com/p/the-time-value-of-lightning-network)
The Time Value of Lightning Network

6:15 PM · Jul 29, 2022

53 Likes 16 Retweets

This report was a long-awaited sequel to Bhatia's evergreen "[The Time Value of Bitcoin and LNRR](#)" piece from 2019, in which Bhatia proposed that the rate of return earned by Lightning Network routing node operators would create Bitcoin's "risk-free rate." This summer, Bhatia and Consorti covered the new progress towards these new bitcoin-native capital markets, with Lightning Channel Leases (as sold through marketplaces like Lightning Pool) and Taro assets now appearing slightly further out on the risk curve from LNRR:



Like Alden, Bhatia and Consorti are incredibly bullish about the impact Taro will have on the Lightning Network, writing:

Taro makes bitcoin and Lightning interoperable with everything. A position in the Lightning Network now not only allows node operators to extract time value from routing bitcoin, but also from routing any other asset as well. The time value of bitcoin held in Lightning Network has taken new forms never seen before in finance.

Again, like Alden, they also highlight how Taro promises to supercharge the compounding network effects we detailed above:

For the Lightning Network, this means more network volume, more network liquidity, and more routing fees for node operators, driving more innovation and capital into the space. Any increase in demand for transactional capacity that will come from these new assets (think

stablecoins) will correspond with increased liquidity on the bitcoin network to facilitate these transactions. Using sats as the transmittal rails for transactions across every currency opens the door for a bitcoin-denominated global capital market.

We couldn't agree more, and are so excited to have released the first version of Taro so the developer community can start building!

As Lightning Labs CEO Elizabeth Stark said in Alden's article:

With Taro, the world's currencies can be routed through bitcoin, making bitcoin the global routing asset and rendering "cross-border" payments obsolete. 

Lightning Labs News

Product

With the launch of the [initial Taro code release](#) discussed above, we're incredibly excited to see the developer community explore Taro and provide feedback as we continue to build. Beyond the initial functionality of mint, send, and receive, be on the lookout for continued development around universes, which are essential for easily interacting with Taro assets. Further, in order to bring Taro assets to Lightning, as the anchor feature for lnd 0.16, we'll be working to deliver simple, unannounced Taproot channel functionality.

lnd v0.15 and lnd v0.15.1 included oft-requested features like the ability to delete past channel states, and a database migration that reduced the disk footprint of revocation logs by 95% for new channel updates. This new optional feature allows for those savings to come to older channels, rather than just new channels.

Further, on the protocol side, [the 0.15.1 release](#) includes the long awaited support for zero confirmation channels, which allows for node operators and Lightning businesses with certain trust assumptions to open channels that do not need to wait for on-chain confirmations to send or receive payments over Lightning. lnd v0.15.1 also defaults to using Taproot addresses everywhere it is applicable across the stack, which lays the foundation for the seamless addition of Taro to Lightning.

Beyond the protocol work, we've also been working on [making the Terminal experience](#) easier and more seamless by including the ability to click a "magic" link which auto-populates your Lightning Node Connect pairing phrase, or simply scanning a QR code from the mobile devices.

Media

Technical Content Lead Leo Weese wrote a great article for Bitcoin Magazine where he explained how Taro will change the market dynamics of stablecoins, diffusing network effects and opening up opportunities for smaller issuers to connect their users globally.

Director of Business Development Ryan Gentry joined Marty Bent, Matt Odell, Adam Curry, famous podcaster and proponent of Podcasting 2.0, and Grant Gilliam of Ten31, for a BitBlockBoom recap, and highlighted how much demand there is for stablecoins deployed on Taro in emerging markets for Bitcoin Magazine Live.

Senior Lead Frontend Engineer Jamal James joined a panel to discuss building on the Lightning Network at Bitcoin Blackout Conference.

Senior Lightning Infrastructure Engineer Oliver Gugger gave a presentation (in German) on Taproot, Schnorr and MuSig2 at Bitcoin-Zitadelle.

Lightning Infrastructure Engineer Konstantin Nick and **Technical Content Lead Leo Weese** were interviewed (in German) on the Einundzwanzig Podcast discussing Taro and how stablecoins will drive adoption of the Bitcoin and the Lightning Networks. **Kon** also talked about assets over Bitcoin and Lightning at BTC 22 - Die Bitcoin Konferenz.

Hiring

Are you an experienced software engineer who embraces the DevOps mindset and wants to improve the Lightning developer experience? We are hiring for a Platform Engineer!

Other roles include:

Lightning Infrastructure Engineer, Senior Engineering Manager, Cryptographic Protocol Engineer, Technical Product Manager, People and Business Operations

Join us in making magic internet money a reality! 🎉

I Want to get involved? Join the Ind Developer Community on Slack.

Meams



Satimoto ⚡
@SatimotoApp

WHO Document 39-12 Filed 04/27/23 Page 3 of 3

Brrr, looks like I just minted 28,000,000,000 \$EUR

8:22 PM · Sep 28, 2022

49 Likes 8 Retweets

Thanks for reading!

Comments



Write a comment...